

REMARKS

// Amendments

In order to more clearly define the present invention, the Applicant has amended the claims as follows.

Claims 1 to 27 have been cancelled.

New method claims 28 to 52 have been added.

New independent claim 28 finds antecedent basis in the specification and in cancelled claim 13 and claim 1.

New method claims 29 to 39 find antecedent basis in the specification and in cancelled claims 2 to 12 respectively except that new claim 36 corresponds to cancelled claim 26 . That is, new claim 36 states that "said oxidation catalyst further comprises an oxidation promoter, and said oxidation promoter is used in an amount of from 0.00005 to 0.8 mole per mole of said substrate".

New method claims 40 to 52 find antecedent basis in the specification and in cancelled claims 14 to 25 and 27, respectively.

Thus, all new claims 28 to 52 are fully supported by the specification and original claims 1 to 27.

Therefore, no new matter has been introduced by the instant amendments.

// With regard to the claim rejection

In the office action, claims 1 to 4 and 9 to 12 have been rejected under 35 USC § 102 as being anticipated by McGary, Jr. (USP 3,095,394). More specifically, the Examiner states as follows.

" Regarding claims 1-4

McGary, Jr. teaches the use of 2,2-diphenyl-1-picrylhydrazyl and 2,2-diphenyl-1-picrylhydrazine (column 1, lines 1-15).

McGary, Jr. does not teach this compound as an oxidation catalyst, however, the claim is directed towards a composition, and its intended use does not serve to add to the patentability of a composition claim.

Regarding claims 9-12

McGary, Jr. teaches the use of metal ions of copper, iron and silver (column 2, line 35 to column 3, line 73).

McGary, Jr. does not teach the use of these metals as oxidation promoters, however, the metals of the reference read directly on those of the instant invention, and as stated above, the claim is directed towards a composition, and its intended use does not serve to add to the patentability of a composition claim.” (emphasis added)

Applicant responds as follows.

In view of the Examiner’s statement, the Applicant has redrafted the claims to specifically require producing a chemical compound using the oxidation catalyst of the present invention.

The McGary, Jr. reference does not teach or suggest the excellent performance of the oxidation catalyst of the present invention.

By using the oxidation catalyst of the present invention, oxidation of various substrates with molecular oxygen can be efficiently performed under moderate conditions, thereby enabling production of a useful chemical compound economically and safely with high selectivity.

With respect to excellent effects of the present invention, attention is drawn to, for example, the following explanation of the “Industrial Applicability” (at pages 126 and 127) of the present specification.

“Industrial Applicability

[0248] As described hereinabove, by the use of the oxidation catalyst of the present invention, oxidation of various substrates with a molecular oxygen can be efficiently performed under moderate conditions, thereby enabling production of a useful chemical compound economically and safely with high selectivity.

[0249] The oxidation catalyst of the present invention can solve the various problems of the conventional processes for oxidation of a substrate, i.e., the problems that it is necessary to use an oxidizing agent which is expensive and/or explosive, that the selectivity for and yield of a desired compound become low, that complicated operations are necessary for purifying an oxidation product to remove therefrom a large amount of by-products, and that a large amount of energy is consumed.

[0250] The oxidation catalyst of the present invention can be advantageously used for performing selective oxidation reaction of various types of substrates, especially, e.g., a hydrocarbon, an alcohol, a carbonyl compound, an ether, an amine, a sulfur compound and a heterocyclic compound. For example, by the use of the oxidation catalyst of the present invention, selective oxidation reactions using a molecular oxygen to produce an oxime compound or a nitro compound from a primary amine or produce a nitron compound from a secondary amine, can be performed without using an expensive oxidizing agent, such as hydrogen peroxide or an organic hydroperoxide and under moderate conditions with high selectivity and high efficiency.”

The excellent effects are fully substantiated by Examples 1 to 32 and Comparative Examples 1 to 6 of the present specification. Of course, the claims are not limited to what is disclosed in the specification. However, these excerpts show that at least some embodiments of the invention are extremely useful.

It is firmly believed that new claims 28 to 52 have **novelty** and **non-obviousness** over the The McGary, Jr. reference.

It is believed that the patentability of new claims 28 to 52 over the The McGary, Jr. reference has been established by the above amendments and explanation.

/III/ Conclusion

Thus, it is believed that the rejection has been removed, and the present application is now in condition for allowance.


Reconsideration and early favorable action on the claims are earnestly solicited.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date: Sept 24 2009

By: 
Mark J. Henry
Registration No. 36,162

1201 New York Ave, N.W., 7th Floor
Washington, D.C. 20005
Telephone: (202) 434-1500
Facsimile: (202) 434-1501